



Monterey Bay National Marine Sanctuary

Sanctuary Office Report

Volume 5, Number 5



A REPORT FOR THE SANCTUARY ADVISORY COUNCIL MEMBERS

REPORTING PERIOD: AUGUST 11, 2008 – SEPTEMBER 22, 2008

ABOUT THE SANCTUARY

Designated in 1992, the Monterey Bay National Marine Sanctuary (MBNMS or Sanctuary) is a federally protected marine area offshore of California's central coast. Stretching from Marin to Cambria, the MBNMS encompasses a shoreline of 276 miles and 5,322 square nautical miles of ocean.

Supporting one of the world's most diverse marine ecosystems, it is home to numerous mammals, seabirds, fishes, invertebrates and plants in a remarkably productive coastal environment. The MBNMS was established for the purpose of resource protection, research, education and public use of this national treasure.

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA) AND NATIONAL MARINE SANCTUARY PROGRAM (NMSP) NEWS

National Marine Sanctuaries Complete Multi-Agency Effort to develop Key Messages for the Ocean and Coastal Observing System (IOOS)

Over the year, education and communication staff of the NOAA Office of National Marine Sanctuaries (ONMS) have led monthly meetings of a multi-agency, multi-organizational committee to develop key communications messages for the Ocean and Coastal Observing System. The committee is comprised of representatives from diverse organizations that all participate in or contribute to America's ocean and coastal observing systems. The committee's work led by sanctuary staff developed five key messages and refining points to convey the importance of the ocean and coastal observing system, including IOOS, to audiences throughout the nation. The ONMS was asked to chair this committee by Ocean.US because of its expertise in education, outreach, and communications. These five key messages were officially handed off to the Ocean.US office on August 26, which will then be submitted to the Interagency Working Group of Ocean Observations (IWGOO) for inclusion in their work.

The Big Swim charity event raises \$25,000 for National Marine Sanctuary Foundation and Channel Islands National Marine Sanctuary

"The Big Swim," the 5th annual Santa Barbara Channel Relay Swim, was held September 12-13 and raised nearly \$25,000 for the National Marine Sanctuary Foundation and Heal the Ocean, a non-profit organization in Santa Barbara, California. The successful event brought together more than 40 brave swimmers and several kayakers who swam and paddled in shifts, some beginning in the dark, across the 26-mile wide Santa Barbara Channel from Santa Cruz Island to Goleta Beach Park. Amongst the swimmers were Claire Fackler, Bill Douros, Julie Bursek, and Matt Pickett from the Office of National Marine Sanctuaries. Funds raised for the National Marine Sanctuary Foundation will be applied to education programs at the Channel Islands National Marine Sanctuary, with a particular focus on providing ocean experiences to underserved students. Running the swim event was the SBCSA. City of Santa Barbara City Council member, Das Williams, awarded the Santa Barbara Channel Swimming Association (SBCSA) a commending proclamation for this successful community event. The SBCSA promotes activities to benefit the ocean, and since 2004 has sponsored an annual relay swim across the Santa Barbara Channel to raise funds for local ocean-caring organizations. Event planning, organization and execution was assisted by Claire Fackler with the Office of National Marine Sanctuaries.

Monterey Bay National Marine Sanctuary's USS MACON expedition to be featured on National Geographic Channel (USA) and international market in 2009

Robert Schwemmer participated in the documentary film production featuring the USS MACON expedition at the Monterey Bay Aquarium Research Institute (MBARI). The USS MACON, a 785-foot dirigible was lost with her four Curtiss Sparrowhawk F9C-2s biplanes offshore of Point Sur on February 12, 1935. In 2006, a team of scientists from Monterey Bay National Marine Sanctuary, ONMS Maritime Heritage Program, MBARI and Stanford University conducted a successful 5-day remotely operated vehicle (ROV) survey of the historic remains of the airship and biplanes. During the research cruise aboard MBARI's *WESTERN FLYER*, more than 40 hours of deepwater high-definition visual surveys were completed utilizing the ROV TIBURON at a depth of 1500 feet of water. The German based production company Spiegel has constructed a full-scale control car and interior features to replicate the MACON. The documentary is due to be released in the Spring of 2009 and will be featured on the National Geographic Channel (USA), Discovery Channel (Canada), two television broadcasts in Germany and currently Spiegel is marketing the documentary to Great Britain, Italy, and Japan.

Hurricane Relief Fund for NOAA Employees Affected by Hurricane Ike

The National Marine Sanctuary Foundation is setting up a Hurricane Relief Fund for NOAA employees affected by Hurricane Ike. We've done this in the past for Sanctuary employees affected by Hurricane Wilma and we are happy to extend this relief fund to other NOAA folks affected by this recent storm. The Foundation has donated \$1,000 to get the pot started and we've had a few additional donations thus far. There is currently a direct link on our homepage, www.NMSfocean.org, where contributions can be made by credit card. People can also send checks with a note that it is for Hurricane Relief. We raised several thousand dollars last time this happened and would expect to do so again. All of the funds will go directly to the managers on the ground who will determine needs at the local level. We are of course aware of the Sanctuary Program and Fisheries facilities in the area. If there are others we should know about—please let us know. Nathan@nmsfocean.org or Lori@nmsfocean.org

Final Environmental Impact Statement Published

On September 16, 2008, the Office of National Marine Sanctuaries began publishing and distributing the Cordell Bank, Gulf of the Farallones, and Monterey Bay Final Environmental Impact Statement. This document was filed at the EPA on September 19, 2008, and a notice informing the public of its availability will be published on September 26, 2008. With this notice, the 30-day cooling off period for the FEIS begins.

Sanctuary Sam Debuts on *Nim's Island* DVD

The NOAA Office of National Marine Sanctuaries has once again partnered with Walden Media, producers of such films as *Bridge to Terabithia*, *Charlotte's Web*, and *The Chronicles of Narnia*®, to promote ocean conservation messages to the public, especially to young people, through the addition of the Sanctuary Sam “Be Wildlife Wise” public service announcement to the *Nim's Island* DVD. Two million copies of the DVD were released to the public in early August 2008. Throughout this partnership, national marine sanctuaries has been prominently featured in a 16-page educator's guide distributed to over 500,000 elementary school teachers, and two mass-produced bookmarks going to various national distribution networks, including Borders, and online materials featured on <http://nimsisland.com>, <http://animalplanet.com/nimsisland>, and <http://sanctuaries.noaa.gov/education>.

Review of the National Oceanographic and Atmospheric Administration's Education Program

The National Academies perform an unparalleled public service by bringing together committees of experts in all areas of scientific and technological endeavor. These experts serve *pro bono* to address critical national issues and give advice to the federal government and the public. NOAA is undergoing an external review of its education programs by the National Academies Review Board. The America COMPETES Act also calls for NOAA to develop a 20-year science education plan to be reevaluated and updated every 5 years. Thus, this NRC review of NOAA's education programs comes at a critical juncture and is poised to provide guidance to the agency as it develops its long-term plan for education. Seaberry Nachbar regarding B-WET California and Claire Fackler regarding ONMS local and regional education will be presenting at the NRC meeting to be held in Irvine, CA on September 15-16, 2008

ONMS West Coast Region's collaborative partnership with the state of Oregon published in *Sea History* magazine

Robert Schwemmer authored an article for *Sea History* magazine, No. 124, Autumn 2008, a publication of the National Maritime Historical Society. The article discusses the collaborative efforts between the ONMS West Coast Region, U.S. Bureau of Land Management, Oregon State Parks and Recreation, and the local community to identify a mystery shipwreck uncovered in the state of Oregon. Earlier in the year a number of beaches along the Oregon coast stretching between Cannon Beach and Bandon experienced a greater degree of sand erosion brought on by winter storm waves. Over the course of two and half months the sand continued to move offshore exposing a shipwreck on the North Spit of Coos Bay, once concealed below 30 feet of sand. At the request of Bill Douros, West Coast regional director, Schwemmer provided research that ultimately led to identifying the mystery shipwreck as the steam schooner *George L. Olson*. A similar article was also authored by Schwemmer and recently published in *Oregon Coast* magazine. Combined, the two publications have a readership of 200,000.

NATIONAL MARINE SANCTUARY NEWS

Channel Islands NMS

Following the unusual number of blue whale deaths that occurred last year, including two confirmed and one probable ship strike, Channel Islands National Marine Sanctuary staff continue to conduct aerial surveys of the Santa Barbara Channel shipping lanes to look for blue whales and other large cetaceans. The latest survey was conducted on Thursday August 7 aboard a U.S. Coast Guard helicopter. No whales were sighted, although sanctuary staff continue to collect sightings data reported by Channel Islands Naturalist Corps (CINC) volunteers aboard a local whale watch vessel operating out of Santa Barbara Harbor. These sightings indicate that blue whales have returned to their seasonal feeding grounds in the Santa Barbara Channel and Channel Islands National Marine Sanctuary, and several recent observations have reported blue whales within the shipping lanes. By sharing updated maps of this information with NOAA Fisheries, the U.S. Coast Guard, and the shipping industry, these observations will very soon trigger the issuance of a US Coast Guard Local Notice to Mariners that will advise ship captains to keep a sharp lookout for whales and, by NOAA request, ask for voluntary slowing of ships to 12 knots or less when transiting the Santa Barbara Channel. Continuing weekly aerial surveys are planned with aircraft support from the U.S. Coast Guard and California Department of Fish and Game, as well as via contract aircraft.

Flower Gardens Bank NMS

NOAA's Flower Garden Banks National Marine Sanctuary held a joint dive expedition with environmental scientists, engineers and lawyers from the Gulf of Mexico's offshore oil industry Aug 24 - 27. This annual expedition offers an opportunity for sanctuary, government agency and private sector representatives to share information in an informal setting, while learning first-hand about the spectacular nature of the Flower Garden Banks National Marine Sanctuary. Flower Garden Banks NMS Education Coordinator Shelley Du Puy, Southeast Region Liaison Bill Kiene, National Outreach Coordinator Kate Thompson and Sanctuary Foundation Government Relations and Education Coordinator Letise LaFeir represented the Office of National Marine Sanctuaries on the trip. They were joined by staff from Minerals Management Service, Chevron, W&T Offshore, Williams Gas Pipelines, Diamond Offshore Drilling, Shell, and BHP Billiton. Aboard the M/V Spree from Freeport Texas, the group was able to make numerous dives at Stetson Bank and East Flower Gardens Bank. Surface intervals between dives were filled with presentations by participants, identifying reef creatures and brainstorming future collaborative efforts to protect and promote the underwater treasures of the Gulf of Mexico.

Gulf of the Farallones NMS

Education/Mavericks Program - Science of Big Waves: The sanctuary partnered with the Center for Talented Youth at John Hopkins University and Mavericks Surf Ventures to lead a science workshop on "Mavericks - the Science of Big Waves" for a group of 15 middle school students. The program included a discussion of how large waves are generated, what makes for "perfect" conditions for the surf contest, how wave conditions are predicted, and big wave surfing technique. The program also included a physical model of waves using an aquarium, a site visit to the reef, a shore-side surf lesson, and a fun-filled relay race to reinforce the shore-side surf lesson.

Olympic Coast NMS

Carol Bernthal, Liam Antrim, and Mary Sue Brancato met with Navy representatives and consultants from Keyport, Washington, who are developing two environmental impact statements for Department of Defense activities off the Pacific Coast, including training and systems testing areas off the Washington Coast. One document proposes a significant expansion of area in the sanctuary for a range used primarily for testing of new equipment under development. The other document addresses activities in the Northwest Training Range that include underwater explosives and other operations with potential acoustic impacts. NOAA Fisheries is a cooperating agency on these National Environmental Policy Act documents. OCNMS will continue to work with Navy on addressing our concerns as well as conducting the 304(d) consultation process as required under the National Marine Sanctuary Act.

Papahānaumokuākea Marine National Monument

The 2008 maritime archaeology team returned on August 28 from a research expedition to the Papahānaumokuākea Marine National Monument. The team, still excited about a recent discovery of the 1837 whaling ship GLEDSTANES at Kure Atoll, discovered a second shipwreck near the end of their journey at French Frigate Shoals. On Saturday, August 23rd, the team set out to survey an area reported as an historic anchorage and shortly after beginning the first towboarding of the day discovered what appears to be an early 19th-century anchor lodged in the reef. After surveying the surrounding area, the team discovered more artifacts, including another large anchor, rigging components, bricks, and three try pots—the latter clearly identifying this shipwreck as a whaler. Only three whaling ships, all American vessels, have been reported lost at French Frigate Shoals and the team is now working to identify it. This expedition wrapped up a successful and exciting research season for ONMS in the Monument.



MONTEREY BAY NATIONAL MARINE SANCTUARY NEWS AND PROGRAM UPDATES



MANAGEMENT

Cannery Row NEWS

Cannery Row Company published 2-page spread in their 24-page visitors guide entitled "Close up on the Sanctuary." 150,000 guides are being distributed in northern and central California Welcome Centers throughout Monterey County, and to the top 200 San Jose corporations. This is all part of the new business partnership with the Sanctuary to develop marketing ideas around sanctuary related themes. Other projects include a new Sanctuary website - "Bay Wonders" which can be found at <http://www.canneryrow.com/bay-wonders.php>, and a public relations partnership where Sanctuary staff serve as a host to for journalists during press visits.

RESEARCH AND MONITORING

SIMoN coordinates Big Sur wildfire study with USGS and UCSC

On August 7th, SIMoN staff met with scientists from the US Geological Survey (USGS) Pacific Science Center and UC Santa Cruz to discuss a unique research opportunity as a result of this summer's Big Sur wildfires. The large-scale fires mobilized tons of organic materials, and much of this is expected to wash down the slopes of the watersheds into the sanctuary this winter. Because pyrogenically-derived organic compounds can be differentiated from other, naturally occurring organics, the role of these fire-derived organics on nearshore kelp forest communities can be investigated. With some funding from SIMoN, match from USGS, and planned use of the FULMAR, a collaborative team is poised to take advantage of this once in a lifetime opportunity to study the linkage between wildfire-derived nutrients and nearshore ecosystems.

SIMoN staff meet with SERC scientist to discuss invasive species vectors

On August 7th, SIMoN staff met with Dr. Chela Zabin, a scientist with the Smithsonian Environmental Research Center (SERC) and University of California, Davis Romberg Tiburon Center for Environmental Studies. Dr. Zabin and her colleagues are beginning a study focused on vectors of transmission for invasive species, and one of the target species is the invasive Asian kelp *Undaria pinnatifida*. Zabin is going to work closely with Monterey Harbormaster Steve Scheiblaue to determine boating patterns and how both recreational and commercial vessels may contribute to the spread of invasive species along the coast of California. This project complements the existing efforts to monitor and manage *Undaria* led by SIMoN staff.

SIMoN adds water quality specialist to SIMoN Science Committee

This week John Hunt, a Water Quality expert working for the UC Davis Marine Pollution Studies Laboratory at Granite Canyon, agreed to serve as a member of the SIMoN Science Committee (SSC) for MBNMS. His research focuses on ecotoxicology at landscape scales, particularly the interactions between land use and water quality in California watersheds. He is involved in the design and implementation of a number of large-scale monitoring programs that characterize conditions and trends in the occurrence, transport, and biological effects of water pollution. The SSC consists of representatives from local agencies, universities, research institutions or science-based organizations with expertise in characterizing, studying and monitoring natural resources. Committee membership is designed to balance representation of the various scientific disciplines within the Sanctuary. Members are appointed for 2-year terms by the Sanctuary Superintendent and SIMoN Director. John Hunt fills an important void within the current SSC, adding considerable knowledge on central coast water quality issues. To read about the SSC, go to:
http://www.sanctuarysimon.org/monterey/sections/simon/simon_science_committee.php.

Sanctuary Currents Symposium website updated

Sanctuary Staff updated the Sanctuary Currents Symposium website (<http://montereybay.noaa.gov/research/symposium.html>), a 13-year record of symposium themes, invited speaker abstracts, research poster abstracts, exhibitors, and awards. The Currents Symposium is an annual event for researchers, educators, students, and the public to learn about current research being conducted in the Sanctuary.

SIMoN staff meets with PISCO to discuss the West Coast Observation Project in MBNMS

On Wednesday August 13, SIMoN staff met with Dr. Mark Carr and his staff to discuss the West Coast Observation Project (WCOBS). This project deals with observation data collected at the five sanctuary sites located on the west coast. The sites involved include Olympic Coast, Cordell Bank, Gulf of the Farallones, Monterey Bay, and Channel Islands. The project focuses on various data streams including ocean temperature, current speed and direction, oxygen, salinity, wind speed and direction, turbidity, and fluorescence collected at numerous new instrument moorings located within each of the five sanctuaries. These instrument moorings are maintained and operated in collaboration with the Partnership for Interdisciplinary Studies of Coastal Oceans (PISCO) and the University of California-Davis, Bodega Marine Laboratory as part of the Pacific Coast Ocean Observing System. Carr discussed potential changes in the deployment of MBNMS assets and providing an updated list of products and how these data have impacted effective management of nearshore resources.

SIMoN staff conducts subtidal MPA monitoring using R/V FULMAR off Big Sur coast

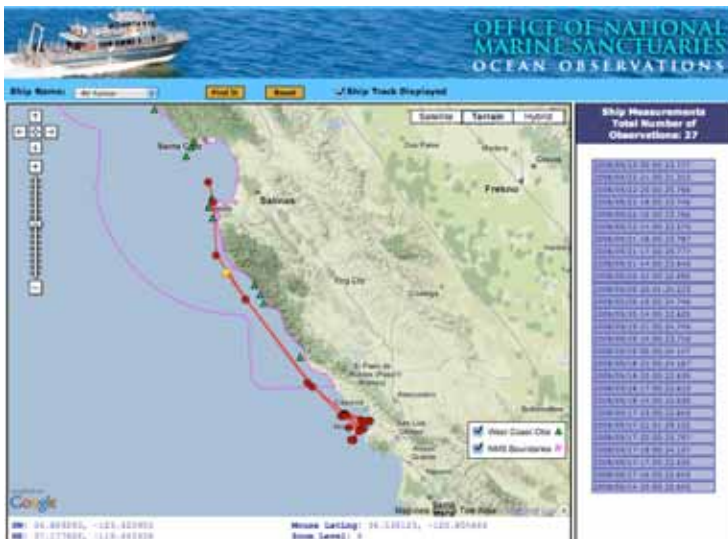
From August 18-21, SIMoN staff and research divers from UC Santa Cruz's Partnership for Interdisciplinary Studies of Coastal Oceans (UCSC-PISCO) sampled 6 sites for invertebrates and algae and 4 for adult and young-of-the-year fishes along the coast of Big Sur, CA. These sites included marine protected areas (MPAs) recently established by the State and adjacent reference sites that are not in an MPA. Researchers completed 96 dives without incident while supervised by NOAA Divemasters Scott Kathey and Chad King. Issues with the Nuvaire dive compressor system and deteriorating sea conditions cancelled the last scheduled day of diving. An additional 5 days scheduled for August 25-29th may be cancelled if the dive compressor is not properly operating.

Grant Received for Diversity Assessment of Davidson Seamount

The CenSeam program (a global census of marine life on seamounts) has awarded a \$ 10,000 mini-grant to MBARI, in collaboration with the MBNMS, to assess "The Environmental Factors Attributing to Diversity and Compositional Variation at Davidson Seamount." Using archived videos, the project will address the Davidson Seamount draft action plan components of characterization and assessing causes for community structure patterns, while contributing significantly to a global database on seamounts.

SIMoN staff continues subtidal MPA monitoring using R/V FULMAR in Monterey Bay

From August 25-28, SIMoN staff and research divers from UC Santa Cruz's Partnership for Interdisciplinary Studies of Coastal Oceans (UCSC-PISCO) sampled 7 sites for adult and young-of-the-year (YOY) fishes in Monterey Bay. These sites included marine protected areas (MPAs) recently established by the State and adjacent reference sites that are not in an MPA. Rough conditions precluded diving south of Point Lobos, so much of the work was in Carmel Bay and along Pebble Beach. 104 dives were completed without incident. Unlike the last three years, the YOY rockfishes have been abundant in both the kelp canopy and along the rocky bottom.



Google map showing near real-time positions of the R/V Fulmar.

New map provides near real-time locations of Sanctuary research vessels and nearshore oceanographic moorings

With funding as a part of the Pacific Coast Ocean Observing System (PaCOOS) (<http://www.pacoos.org/>), SIMoN and the National Coastal Data Development Center (NCDDC) developed a Google map (http://www.ncddc.noaa.gov/website/google_maps/PaCOOS/map_sPaCOOS.htm) that shows near real-time positions of the Office of National Marine Sanctuaries research vessels *Fulmar*, *Shearwater*, *Auk*, and *Manta*. Along with position data, the latest oceanographic and meteorological data are also published. This map also plots the locations of all moorings from the West Coast Observing System (http://www.sanctuariesimon.org/regional_sections/obs/) and provides direct access to the oceanographic data recorded by each mooring.

SIMoN photos published in comprehensive west coast coastal fish identification book

Several photos taken by SIMoN staff were recently published in "Coastal Fish Identification: California to Alaska, 2nd Edition" (<http://www.reef.org/node/450>) by Paul Humann and Ned Deloach.

Save The Earth visits Monterey Bay

This year, Save The Earth, provided \$ 10,000 in grants to support Davidson Seamount research on endemism and to support a Beach COMBERS volunteer enrichment. Save The Earth funds research on applied science to support conservation (www.savetheearth.org).

Last week, representatives from Save The Earth participated in a Beach COMBERS survey, viewed a new short video describing the Beach COMBERS program, and toured MBARI. This is a good collaborative effort to support Sanctuary management plan needs.

SIMoN has a new green link

The SIMoN program and web site was added to the Monterey County Green Resources Network (<http://greenmonterey.org/wiki/tiki-index.php?page=Monterey+County+Green+Resource+Network>), providing another avenue for the public to learn about Sanctuary habitats, research, and monitoring.

BeachCOMBERS program highlighted in QUEST radio story

The BeachCOMBERS beach survey program was highlighted in a KQED QUEST radio program titled "Sea of Plastic", which aired on Monday August 25th. The story explained how plastic trash gets into ocean waters, onto beaches, and ultimately into the stomachs of animals such as seabirds. On average 15 pieces of plastic were found in the stomachs of Northern Fulmars collected by the BeachCOMBERS program. Recent bans on certain types of plastic, such as grocery bags or polystyrene, by cities in California as well as the proposed state-wide ban are discussed. To hear the story and see some photos, go to <http://www.kqed.org/quest/radio/sea-of-plastic>.

SIMoN staff continues removal of invasive alga from Monterey Harbor

On September 4, SIMoN staff surveyed a section of the Monterey Harbor for the invasive Asian kelp *Undaria pinnatifida*. In addition to two divers manually removing kelp, Chad King gathered underwater video of the methods used, and collected footage of similar-looking native species. This will be used in future training sessions of volunteer divers used to manage the invasion of the kelp in the harbor. This is a collaborative effort with the City of Monterey and the Harbormaster's Office and the goal is to reduce the spread of the kelp and minimize its impacts to harbor operation and native biota.

High number of beach cast Common Murres on Monterey Bay beaches

On September 5, Beach COMBERS volunteers reported a higher than usual number of beach cast young Common Murres. The increase in deposition may be explained by a successful breeding season. Beach COMBERS, funded by the Sanctuary Integrated Monitoring Network (SIMoN) is a collaborative effort between the Monterey Bay National Marine Sanctuary, the Moss Landing Marine Laboratories, the California Department of Fish and Game and Marine Wildlife Veterinary Care and Research Center, and other state and research institutions, with the specific goal of using deposition of beach cast carcasses as an index of the health of the sanctuary. For additional information, see

<http://www.sanctuarysimon.org/monterey/sections/beachCombers/index.php>.



Common Murres with oil spots.

Photo Credit: SIMoN/NOAA

Ecological Characterization & Habitat Modeling of the Davidson Seamount Fauna

Efforts are currently underway to incorporate Davidson Seamount into the Monterey Bay National Marine Sanctuary (MBNMS). One objective in realizing this goal is to increase understanding of the seamount through characterization and ecological process studies. Principal Investigators from the Monterey Bay Aquarium Research Institute (MBARI) have created a faunal inventory of megafaunal animals readily identifiable in video from research cruises to Davidson Seamount during 2000-2007 through collaborations of MBARI, MBNMS, and NOAA. In total, 28 Remotely Operated Vehicle dives yielded more than 60,000 faunal observations from more than 200 hours of high-resolution video. The goal of this project is compile data from transects at Davidson Seamount into a single cohesive database. In addition, the database will contain vital ecological information about the species. This provides a unique opportunity to evaluate several alternative hypotheses on the role of seamounts (i.e., seamounts serve as a source or sink for larvae), and to further elucidate the importance of Davidson Seamount to the surrounding deep-sea ecosystem. Information about this project can be found on the new SIMoN project page, http://www.sanctuarysimon.org/monterey/sections/seamounts/project_info.php?projectID=100340&sec=sm.

A Plan for the Davidson Seamount Management Zone

In preparation for the release of the final Joint Management Plan (JMP), staff completed a plan for the Davidson Seamount Management Zone. This plan is based on the Davidson Seamount Action Plan in the JMP, with more specifics on the status of the strategies and work to be done. It will be updated annually with the sanctuary annual operating plan process, and be available as a guide for collaborators interested in Davidson Seamount.

RESOURCE PROTECTION

Light Brown Apple Moth Coordination

Deirdre Hall, Permit Coordinator, drafted comments to the California Department of Food and Agriculture (CDFA) related to the CDFA's Notice of Preparation for the Draft Programmatic EIR for the Light Brown Apple Moth (LBAM) Eradication Program. This Notice outlines the CDFA's plans to evaluate the effects of implementation of eradication strategies throughout the state. The primary strategy for eradicating the LBAM was recently changed from aerial treatment with pheromone to other ground-based methods within populated areas. Given that the strategy for eradication efforts has evolved, the MBNMS marine-centric resource protection concerns will likely be alleviated in the future.

Inter-agency Coordination and Review

Deirdre Hall, Permit Coordinator, coordinated with staff from the US Environmental Protection Agency to discuss the Sampling and Analysis Plan for the Santa Cruz Harbor 2008-2009 dredge season. The MBNMS has approved this plan and will evaluate the sediment testing results in advance of the start of dredge operations.

Monterey Bay CoastKeepers new to the Central Coast

On August 13th, Water Quality Protection Program staff met with a representative of the Monterey Bay CoastKeepers. This organization is fairly new to the central coast and will be focusing their efforts on encouraging growers to participate in the Ag Waiver Program at the Central Coast Regional Water Quality Control Board. They will also be conducting water quality monitoring in the Salinas Valley and Pajaro watersheds. Staff informed them of the sanctuary's Agriculture and Rural Lands Action Plan as well as the volunteer water quality monitoring programs implemented by the sanctuary.

MBNMS participates in inter-agency planning for high debris flows following recent fires in Big Sur Mountains

MBNMS has participated in several meetings to prepare for the exceptionally high debris flows expected along the Big Sur coastline during this winter's rainy season as a result of the recent Basin Complex Fire and the Indians Fire. Together, the fires burned approximately 240,000 acres of federal, state and private lands in the Big Sur Mountains. The region's steep west-facing drainage basins act like funnels channeling rain runoff into Sanctuary waters below. The burned areas have now lost their protective cover of vegetation, making these drainage basins highly vulnerable to flooding, erosion, mud and debris flows and landslides. Congressman Sam Farr and Monterey County Supervisor Dave Potter have convened several meetings to ensure effective interagency coordination in responding to the expected Highway 1 closure emergencies. MBNMS is a member of the Big Sur Multi-Agency Advisory Council, which recently held a special session with Big Sur residents to address emergency response to expected landslides, restoration of high erosion areas on public and private lands and preparations for likely road closures this winter. MBNMS has been meeting with the California Department of Transportation staff (Caltrans) to identify high risk areas along the coastline and develop appropriate debris removal protocols designed to protect intertidal and nearshore subtidal resources within the Sanctuary. MBNMS is also participating in a series of interagency meetings hosted by the U.S. Forest Service's Burned Area Emergency Response (BAER) team. Approximately 83 percent of the burn area is within the Monterey District of the Los Padres National Forest. MBNMS is providing the BAER team with information about potential Sanctuary resources at risk, including data from intertidal and subtidal biological sensitivity assessments along the Big Sur coast, which will be used by the BAER Team to identify "values at risk" and to inform their recommendations on how to minimize further potential damage due to debris flows and flooding during the upcoming rainy season.

Resource Protection Comments on NPDES Permit

Resource Protection staff developed, coordinated, and submitted comments to the Regional Water Quality Control Board on the National Pollutant Discharge Elimination System (NPDES) General permit for discharges from aquaculture facilities and aquariums. The MBNMS has a Memorandum of Agreement with the Regional Board for Water Quality, which grants the MBNMS advance opportunity for review of pending permits and allows recommendations and changes to the draft permit in advance of public review. All advice was accepted without debate. The RWQCB will be releasing this draft permit to the public in the next few weeks, with a hearing date scheduled for December 5th. The MBNMS will authorize this permit once it is approved by the board.

Coordination of Phytoplankton Monitoring Begins on Central Coast

On August 18th, staff from the Water Quality Protection Program attended a workshop sponsored by CENCOOS to coordinate activities on the Central Coast related to phytoplankton monitoring and harmful algal bloom research. It was clear there is a need for collaboration among numerous academic and governmental organizations. Five sites were chosen to initiate data collection. Physical, chemical and biological monitoring parameters were agreed to as well.

Ocean Protection Council Funding Opportunities

On August 19th, staff from the Resource Protection Team and Monterey Bay Sanctuary Foundation traveled to Oakland, CA to provide comment on the Ocean Protection Council's draft Funding Priorities document. The document outlines priorities for the next two years (2008-2010) related to governance, research, water quality, ecosystems and education. Staff provided multiple comments as well as followed up with a comment letter from the Superintendent.

Food Safety and Environmental Protection Leaders Gather

On August 20th, Sanctuary staff coordinated a daylong meeting of the Farm, Food Safety, & Conservation Network (Network) to foster mutual understanding towards co-management of food safety and the environment. Roughly 70 leaders from agricultural industry, environmental protection, and academia gathered in Salinas to hear updates on the intersection of food safety requirements and conservation practices, policy, and science. Representatives from every level of the production chain (growers, handlers, buyers) and attorneys presented and participated along with environmental protection leaders from the Sanctuary, EPA, The Nature Conservancy, CA Dept. of Fish and Game, and many others. Afternoon working group sessions brought stakeholders together to identify priority issues and actions that Network member organizations can take to reconcile conflicts between food safety and conservation requirements which have arisen on the central coast in the wake of the 2006 E.coli outbreak associated with spinach. The Sanctuary has taken an active leadership role in coordinating discussions to reconcile these conflicts and to support the agricultural industry's efforts to reduce food safety risks through methods that do not adversely affect water quality.

Agricultural economist brings new approach to incentivizing agricultural water quality protection in Sanctuary watersheds

On August 21 and 22, Sanctuary staff facilitated grower and rancher stakeholder forums to discuss performance-based incentives with Jonathan Winsten, agricultural economist from Winrock International and the University of Vermont. Current conservation incentive programs are limited in that they provide cost-share for implementation of a suite of practices without consideration of the environmental outcomes of those practices. Performance-based incentives are a new approach, which shift the focus away from the means to instead rewarding the ends and thus fostering greater cost-effectiveness and innovation. In Salinas on August 21st central coast farmers along with partners from resource protection agencies and UC Cooperative Extension discussed interest and feasibility of pursuing a pilot project with Dr. Winsten to develop incentive payments that are linked to measurable indicators of environmental performance on farms. On August 22nd in King City ranchers expressed interest in pursuing a parallel pilot for rewarding environmental performance of rangeland in Sanctuary watersheds. Sanctuary staff will continue to work with grower and rancher groups in developing recommendations for performance-based incentives.

MBNMS Network Hosts Backyard to Bay Event

On August 20th, MBNMS staff hosted the first Backyard to Bay event of the season at Lover's Point in Pacific Grove. These events, which aim to educate the public about watersheds and local watershed issues, was held as part of the Urban Watch volunteer water quality monitoring program in Pacific Grove. This Backyard to Bay event focused on "What is a Watershed?" Staff used their watershed model and other materials to show citizens how their everyday actions are connected to health of the Monterey Bay Sanctuary. Urban Watch volunteers were nearby, processing water samples for common urban pollutants, which showed the public what the program is about as well as what was in the water that day. On Saturday, September 6th, Sanctuary staff met with staff from the Stormwater and Education Alliance to host the second Backyard to Bay event. This event was held near the member's entrance to the Monterey Bay Aquarium. This successful event was aimed to educate citizens about watersheds, watershed issues, and how to prepare a home for the rainy season.

Innovative technology uses plankton for toxicity testing

On August 29th, Water Quality Protection Program staff attended a presentation and demonstration of the use of bioluminescent dinoflagellates as biosensors for toxicity in both freshwater and seawater. The US Navy first patented the idea when they realized that the more contamination was present in sea water the less biolumination occurred in the phytoplankton. This new technology allows for an inexpensive and quick determination of the presence and severity of toxins in surface waters.

Sanctuary Staff Plan Regional Wetlands Science Symposium

On September 5, Water Quality Protection Program Staff met with Coastal Commission staff to plan a session for the Central Coast Wetland Science Symposium. The symposium will showcase wetlands work in the region related to setting goals, implementing changes, and evaluating success to improve wetlands health. The symposium will be held at Moss Landing Marine Laboratories on September 24, 2008.

MBNMS Teams Meet With Department of Fish and Game

Resource Protection Team and Research Team staff met with the California Department of Fish and Game on September 17th to discuss issues related to scientific research permits within the MBNMS. Staff discussed inter-agency coordination, permitting, regulations, jurisdiction, improvements and outreach. We expect that coordination with the state will be enhanced as a result from this meeting.

Network Volunteers Participate in First Flush/Dry Run Training event

On the evening of September 17th, 28 volunteers participated in a classroom training for the First Flush event. Participants of the First Flush program monitor storm drain outfalls around Monterey Bay during the first significant rain of the season. After the classroom training, 40 volunteers participated in the field training, or Dry Run event, in which all storm drain sites (37 from Half Moon Bay to Carmel) are monitored during dry weather. Currently, all volunteers are on call until the rain begins.

Emergency Response and Enforcement

Places Of Potential Refuge (PPOR) for Vessels in Distress

On August 7th, Scott Kathey contributed to a planning session to identify Potential Places Of Refuge (PPOR) for vessels in distress within the MBNMS. The Coast Guard has initiated a national effort to pre-identify locations where a ship in distress might go for shelter and repairs in the event of an emergency. This initiative stems from a resolution by the International Maritime Organization to identify PPOR after the oil tanker PRESTIGE broke apart at sea in 2002, creating an environmental catastrophe in Spain due to repeated denials for safe anchorage. The central coast Area Contingency Plan will identify potential sites within the MBNMS where ships of all sizes could find refuge for repairs during emergencies to prevent widespread environmental damage.

Oil Spill Boom Deployment Drill

On August 13th, Scott Kathey participated in an oil spill boom deployment exercise conducted at Monterey Harbor by multiple local, state, and federal agencies. The drill provided valuable field experience in the logistics and constraints involved in the deployment of oil spill boom. The Monterey city fire and harbor departments did an excellent job of organizing, coordinating, and conducting the drill.

EDUCATION, VOLUNTEER AND OUTREACH PROGRAMS

Punk Rockers Return to Help Sanctuary

On August 12th, 175 members of the Vans Warped tour participated in its second year of watershed conservation activities along the shores of the Monterey Bay National Marine Sanctuary. The MBNMS coordinated activities with a variety of local agencies to accommodate the large number of participants. Volunteers removed invasive plants, collected native plant seeds, cleaned up watershed areas and beaches, removed invasive seaweeds and painted storm drains with "No Dumping, Flows to Sanctuary." This collective effort resulted in 525 hours of donated labor, at a dollar value of over \$10,000. This 18-25 year old demographic is the hardest to reach for conservation efforts and the MBNMS is happy to work with EarthEcho International to coordinate the event.

Sanctuary Staff hosts Volunteers In Asia (VIA) Program

On August 11 MBNMS staff provided a full day of sanctuary information and activities for 15 students from Stanford University's VIA "Environment and Sustainability" Program. The students, from China, Japan and Taiwan, were given a presentation about the sanctuary, a guided tour along the Monterey waterfront, and training on how to stencil storm drains. The students participated in stenciling 24 storm drains in Pacific Grove with sanctuary staff.



MERITO teacher training at Elkhorn Slough.
Photo Credit: Sacha

MBNMS MERITO staff train 48 community leaders to run the MERITO Academy

The Monterey Bay National Marine Sanctuary's Multicultural Education for Resource Issues Threatening Oceans (MERITO) program hosted its 5th annual MERITO Academy teacher training on August 22-23, 2008 at the Elkhorn Slough National Estuarine Research Reserve. The training prepared 48 teachers and extended learning program leaders from 22 sites in the cities of Freedom, Marina, Monterey, Salinas, Santa Cruz, Seaside, and Watsonville to deliver the 40-week MERITO Academy after school program to an estimated 350 historically underserved audiences in the Monterey Bay Area. MERITO Academy leaders received copies of the new MERITO Academy Activity Guide, an introduction to the MBNMS, a watershed model demonstration, and the resources, supplies, and knowledge to conduct hands-on activities from the guide. Guest speakers from City of Watsonville, Monterey Regional Water Pollution Control Agency, and Elkhorn Slough National Estuarine Research Reserve discussed partnership opportunities for MERITO Academy programs. This sanctuary and NOAA's Bay Watershed Education and Training Program (BWET) funded training provides hands-on, inquiry based watershed and ocean science experiences for teachers and extended learning leaders to lead MERITO Academy programs for 5th to 8th grade students who are predominately English language learners.

Audio Visual Production for Exploration Center

Monterey Bay Sanctuary education staff met with exhibit developers in Seattle to discuss and refine the first text, graphic panels and audiovisual production for the MBNMS Exploration Center in Santa Cruz. Based on visitor experience, this will lay the foundation for the graphic style and content on signs and interactive video kiosks for the center. Comments on the first round of AV/Graphics for the Monterey Bay Sanctuary's Exploration Center were submitted back to the center's interpretive designer. This is a major step in the final phase of interpretive development for Monterey's largest interpretive facility.

Monterey Bay Staff goes to the Santa Cruz County Fair

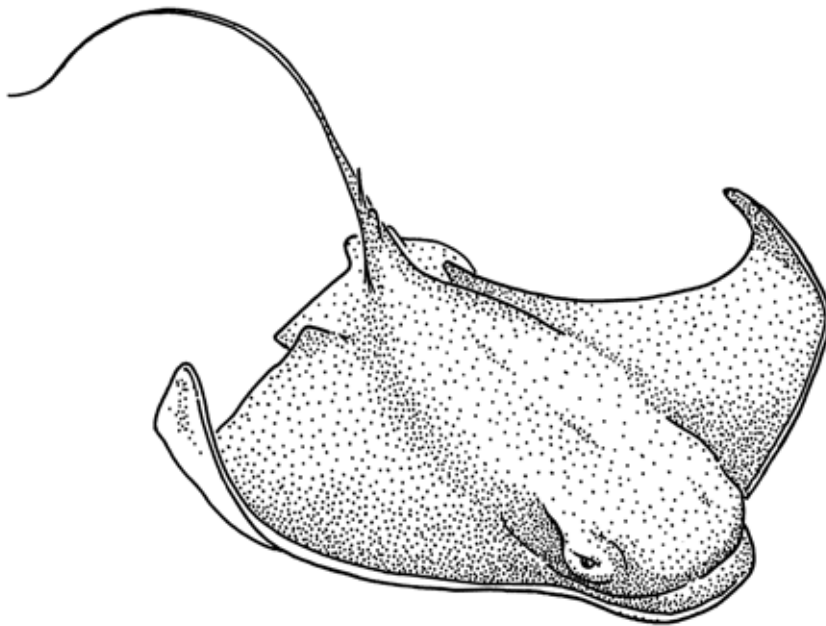
Staff of the Monterey Bay National Marine Sanctuary are exhibiting at the Santa Cruz County Fair, September 9th-14th. MBNMS will be sharing a booth with three other ocean and watershed agencies to cover the 28 shifts. Staff will utilize the watershed model as a teaching tool for fair goers, will recruit volunteers for water quality monitoring and shoreline interpretation efforts and share plans for the MBNMS Exploration Center.

MERITO in Coastal Clean Up Day

On September 20th, MBNMS-MERITO participated as beach captain in the 24th Annual California Coastal Clean Up Day. MBNMS-MERITO staff hosted this event at Salinas River State Beach, near Moss Landing and the Elkhorn Slough National Estuarine Research Reserve (ESNERR). 91 volunteers collected 145 pounds of combined trash and recyclable materials from the beach. This event provided MBNMS staff a good opportunity to talk about the Sanctuary and Marine Debris Issues.

New Signs for MBNMS Shoreline

A total of 17 new interpretive signs have been completed for the MBNMS shoreline through the NMS west coast signage program. Eight signs will be placed along Pacific Grove and nine will be placed at the Monterey harbor waterfront along the popular recreation trail. Partners involved in this project include both cities, the CA Department of Fish and Game, and the Monterey Bay Aquarium and Pacific Grove Natural History Museum. Eight of the signs address the state's new marine protected areas and include Spanish translation. Other sign topics include responsible wildlife watching, water quality, threatened & endangered species, research & monitoring with the *R/V Fulmar* and more. The City of Pacific Grove has provided \$10,000 towards the project. Both cities will install the signs as well. The signs are complete, but need to be fabricated and installed.



SIGNIFICANT NEWS COVERAGE

7/11/08 – Salinas Californian, “4 sentenced for taking abalone in Big Sur”

7/16/08 – San Luis New Times, “Taking watch on the Montebello”

7/17/08 – Monterey County Weekly, “To protect turtles, California state legislators pass a resolution to ban long line fishing. The federal fisheries council may not care”

7/19/08 – San Francisco Chronicle, “California tangles with U.S. to save turtles”

7/24/08 – San Francisco Chronicle, “Felony charges for ship's management”

7/24/08 – San Francisco Chronicle, “Air board OKs toughest limits on ship exhausts”

7/25/08 – Los Angeles Times, “California adopts stiff pollution rules for ships”

7/28/08 – San Luis Tribune, “New desal intake spot identified in Cambria”

7/30/08 – San Jose Mercury News, “California considers ban on plastic bags to protect marine life”

8/06/08 – Metro Santa Cruz, “The ocean conservation heroes at Save Our Shores retool for a new generation of threats”

08/06/08 – Santa Cruz Metro, “The Clean Marine Machine” by Molly Zapp

08/08/08 – San Jose Mercury News “Man drives off wharf, fire crews employ recent training”, by Jennifer Squires, Sentinel Staff Writer

8/24/08 – Fresno Bee, “Pacific Delight” by Guy Keeler

08/26/08 – San Francisco Chronicle, “Scientists see hopeful signs of sea life”

08/28/08 – Santa Cruz Sentinel, “Electric barrier could help keep seals from salmon at San Lorenzo River”

08/31/08 – San Jose Mercury News, “Biologists launch effort to clean up lost fishing gear off California coast”

09/02/08 – The Salinas Californian, “NOAA awards \$658K in Monterey Bay Area environmental education grants”

09/02/08 – NOAA News, “NOAA News Release: NOAA Awards Monterey Bay Area Environmental Education Grants”

09/04/08 – Monterey County Herald, “Veteran scuba diver dies off Pacific Grove”

09/04/08 – Fort Bragg Advocate News, “PG&E dumps MMS wave process, county to sue FERC

09/06/08 – San Francisco Chronicle, “Cosco Busan operating firm offers plea”

09/08/08 – San Francisco Chronicle, “Monterey Bay Aquarium releases great white”

09/2008 – San Jose Magazine, “American Dreamer”

09/03/08 – 7th Space Interactive, “NOAA has announced the award of 13 education grants totaling nearly \$658,000 to Monterey Bay area schools and non-profit groups”

09/09/08 – Salinas Californian, “Monterey Bay’s First Flush program needs volunteers”

WEB SITE (<http://montereybay.noaa.gov/>)

Recent Updates

Visit the web pages listed below to see recently updated sections of the MBNMS web site.

- MBNMS Decision Rationale regarding the need for MPAs in the sanctuary
http://www.montereybay.noaa.gov/resourcepro/resmanissues/mpa/041508mpa_rationale.html

*Please take a few moments to peruse the site. Your feedback is greatly appreciated.
Comments and suggestions can be sent to andrew.white@noaa.gov.*

FUN, OCEAN RELATED WEB SITES

Encyclopedia of the Sanctuaries

<http://www.ocean.com/Library/Encyclopedia/>

Oceans Live

<http://www.oceanslive.org/portal/>

SIMON

www.mbnms-simon.org

National Marine Sanctuary Program

<http://www.sanctuaries.nos.noaa.gov/>

NOAA National Centers for Coastal Ocean Science

<http://coastalscience.noaa.gov/>

National Estuarine Research Reserve System

<http://nerrs.noaa.gov/>

NOAA Ocean Explorer

<http://oceanexplorer.noaa.gov/>

National Data Buoy Center

<http://www.ndbc.noaa.gov/rmd.shtml>

National Ocean Service

<http://www.nos.noaa.gov/>

National Oceanic & Atmospheric Administration

<http://www.noaa.gov/>

Thank You Ocean

<http://www.thankyouocean.org/>

Learn More About Your Sanctuary

The Sanctuary Office Report is produced bi-monthly by the Monterey Bay National Marine Sanctuary in conjunction with Sanctuary Advisory Council meetings. To learn more about the Sanctuary please visit our web site at: <http://www.montereybay.noaa.gov>.

To learn more about the Sanctuary Advisory Council please visit:
<http://www.montereybay.noaa.gov/intro/advisory.html>

The National Marine Sanctuary Program

The Monterey Bay National Marine Sanctuary is one of 14 marine protected areas in the National Marine Sanctuary System that encompass more than 150,000 square miles of marine and Great Lakes waters from Washington State to the Florida Keys, and from Lake Huron to American Samoa. The system includes 13 national marine sanctuaries and the Papahānaumokuākea Marine National Monument. Visit the NMSP web site at: <http://www.sanctuaries.nos.noaa.gov/>

Get involved and stay informed!

To learn how to get involved in the Sanctuary visit:
<http://montereybay.noaa.gov/educate/internship.html>

Sign up for the MBNMS listserv to receive email notices about upcoming Sanctuary events, and public meetings of the Sanctuary Advisory Council and its Working Groups:
<http://montereybay.noaa.gov/discussiongroups/disgroups.html>.



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Jennifer Brown – Research Associate
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Sonya Padron – Bilingual Education Specialist
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Lisa Wooninck – Resource Protection Specialist
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Sophie De Beukelaer – GIS Analyst
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Hans Burning – R/V Fulmar Operator
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